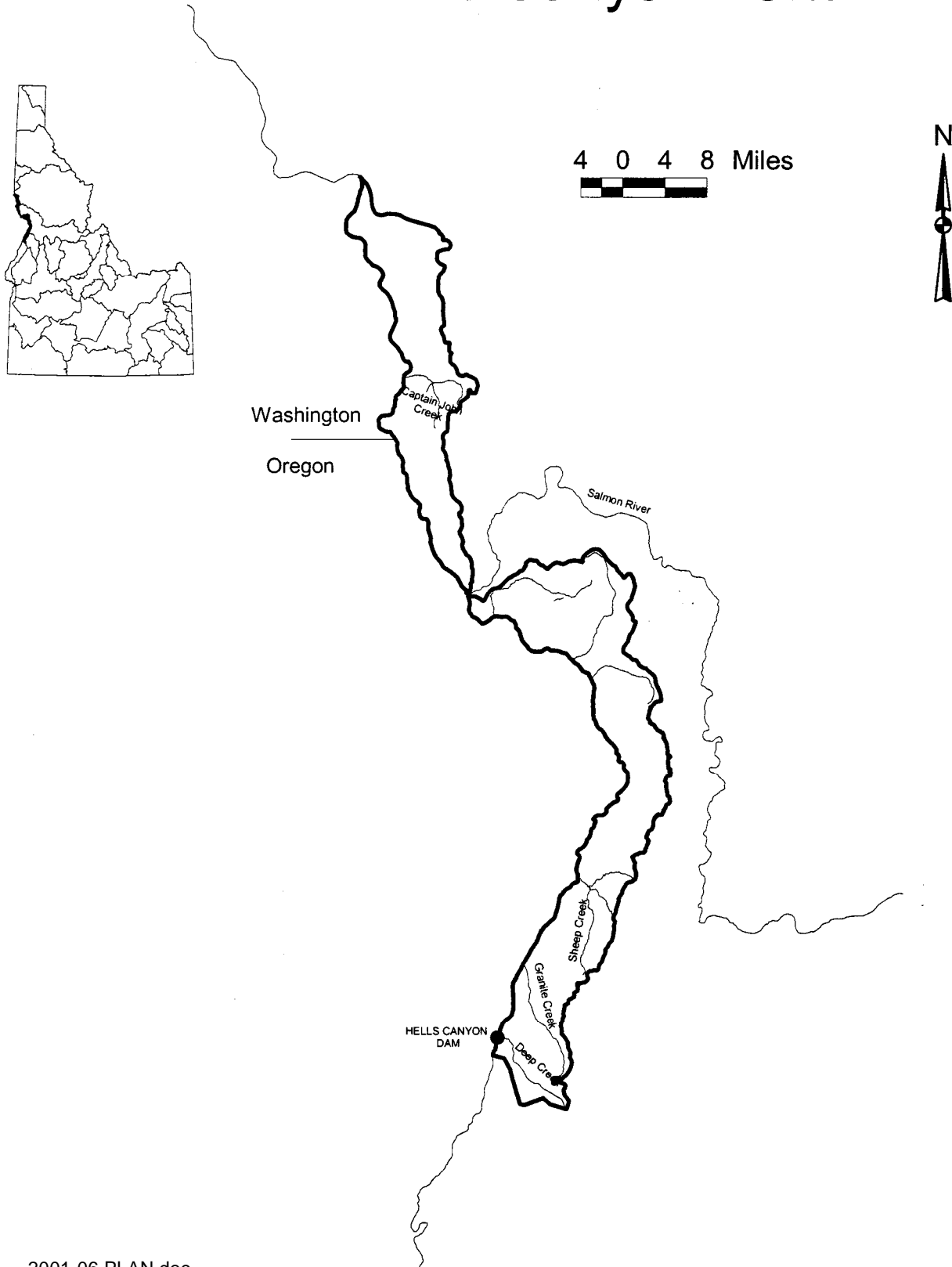


# Snake River Drainage

## Idaho/Washington Border to Hells Canyon Dam



## 5. SNAKE RIVER AND MINOR TRIBUTARIES IDAHO/WASHINGTON BORDER TO HELLS CANYON DAM

### A. Overview

The portion of the Snake River from the Idaho-Washington border at Lewiston upstream to Hells Canyon Dam is 108 miles in length. The section from the Washington-Oregon border to Hells Canyon Dam flows through the deepest gorge in the United States in the Hells Canyon National Recreation Area. Forty miles of the river from the Washington-Oregon border to Big Canyon Creek is designated a "scenic" river under the Wild and Scenic Rivers System, and the remaining upper 32 miles is classified as "wild." Both the Idaho and Oregon sides of the river in the upper portions of the recreation area are bounded by wilderness. Legislation passed by Congress in 1989 prohibits the Federal Energy Regulatory Commission from issuing any licenses to develop new mainstem hydropower projects in the Snake River. Congressional intent also includes federally authorized projects.

River flows are controlled by Hells Canyon Dam and upstream storage. Daily water levels can fluctuate vertically 3-4 feet below Hells Canyon Dam. Quality of water passing through the canyon has improved substantially since the creation of the upriver impoundments. The reservoirs act as settling basins that enhance water quality. Recreational use of the river from Hells Canyon Dam to Lewiston is very high.

The lower portion of the river near Lewiston is impounded by Lower Granite Dam, which lies 40 miles west of Lewiston. The reservoir extends above the towns of Lewiston and Clarkston, making the area an inland seaport.

The Snake River from Lewiston upstream is the migration corridor for adult and juvenile anadromous fish moving to and from the Salmon, Imnaha, and Grande Ronde subbasins. Spring, summer, and fall chinook salmon, sockeye salmon, Pacific lamprey, and steelhead trout pass through this reach of the river. Fall chinook also spawn in the mainstem of the Snake River. Most of the minor Snake River tributaries, which are accessible to anadromous fish, such as Granite, Sheep, and Captain John creeks, are suitable for steelhead spawning and rearing.

The mainstem Snake River will continue to be managed for exploitation of hatchery steelhead but consumptive harvest of naturally produced steelhead or chinook is not expected during the next five years.

Major resident game fish species found in the river include smallmouth bass, white sturgeon and rainbow trout. The rainbow trout fishery is primarily supported by maintenance stocking. The present sturgeon fishery is nonconsumptive because of depressed populations. Sturgeon ranging to 11 feet have been caught in recent years.

The small tributaries in this reach of the Snake River drain from high, forested areas through break lands to arid bottoms before entering the river. Many streams have a very steep gradient and are accessible to steelhead trout only in the lower reaches. The upper reaches of some of the larger streams, such as Granite and Sheep creeks, support populations of resident rainbow trout, cutthroat trout and bull trout.

B. Objectives and Programs

1. Objective: Improve juvenile fish migration survival to lower Granite Dam.

Program: Establish long-term total dissolved gas monitoring stations below Hells Canyon Dam. Collect data on anadromous and resident fish populations, including mortality and gas bubble incidence during periods of high gas levels and correlate with anadromous adult returns. Coordinate all activities with Idaho Power Company. Develop and work to obtain flow regimes in the Snake River that maximize survival of migrating juvenile and adult anadromous fish. Continue to develop smolt timing and relative abundance indices to aid control of flow augmentation and water storage management.

Program: Document impacts of fluctuating water levels on fall chinook survival, spawning success, and ecology. Work with Idaho Power Company and federal regulatory agencies to minimize flow fluctuations from Hells Canyon Dam to enhance fall chinook survival.

2. Enhance game fish production below Hells Canyon Dam.

Program: Document impacts of fluctuating water levels on game fish with emphasis on smallmouth bass and white sturgeon, survival, spawning success, and ecology. Work with Idaho Power Company and federal regulatory agencies to minimize flow fluctuations from Hells Canyon Dam to enhance resident game fish survival.

3. Objective: Manage mountain lakes within productivity and user preference constraints of individual lakes.

Program: Continue mountain lakes investigations in cooperation with USFS to collect biological, physical and chemical characteristics of each lake. Using acquired information, develop management plans.

Drainage: SNAKE RIVER AND MINOR TRIBUTARIES - IDAHO/WASHINGTON BORDER TO HELLS CANYON DAM					
Water	Miles/acre	Fishery			Management Direction
		Type	Species Present	Management	
Snake River from the Idaho/ Washington border to Hells Canyon Dam	183/	Mixed/ Anadromous	Steelhead Chinook salmon	Anadromous	Manage minor tributaries for natural production of steelhead. Minimize impacts to naturally produced steelhead and spring chinook salmon. Maximize harvest of surplus hatchery steelhead. Provide sport-fishing opportunity upstream of the Salmon River for excess hatchery spring chinook salmon. Coordinate fall chinook salmon management with lower Snake River managers.
			Rainbow trout Smallmouth bass Channel catfish Mountain whitefish	General	Coordinate all management and regulations with adjoining states, USFS, and Nez Perce Tribe. Continue evaluation of all species. Evaluate impacts of resident fish on juvenile fall chinook.
			Bull trout	Conservation	Closed to harvest.
			White sturgeon	Conservation	Closed to harvest. Continue population monitoring of white sturgeon. Evaluate effects of tribal harvest on population structure. Evaluate need for spawning closure. No hatchery supplementation.
Sheep and Granite Creeks		Mixed/ Anadromous	Steelhead Chinook salmon	Anadromous	Manage for natural production of steelhead.
			Rainbow trout	Wild Trout	Restrict harvest to minimize impacts to naturally-produced juvenile steelhead
			Bull trout	Conservation	Closed to harvest
Alpine lakes	/82	Coldwater	Rainbow trout Cutthroat trout Brook trout Arctic grayling Golden trout	General	Provide 1.0-fish/hour catch rates. Develop management strategies for each lake. Stock only those lakes that do not support natural reproduction. Substitute sterile rainbow trout in stocking program to reduce threat of genetic impacts on native fish. Improve fish population structure in stunted brook trout lakes through predator introduction or chemical rehabilitation.
			Bull trout	Conservation	Closed to Harvest